

APPENDIX
LISTING OF CLAIMS

Claim 1 (Cancelled)

Claim 2 (Cancelled)

Claim 3 (Cancelled)

Claim 4 (Cancelled)

Claim 5 (Cancelled)

Claim 6 (Cancelled)

Claim 7 (Cancelled)

Claim 8 (Cancelled)

Claim 9 (Cancelled)

Claim 10 (Cancelled)

Claim 11 (Cancelled)

Claim 12 (Cancelled)

Claim 13 (Cancelled)

14. (Allowed) A method of conductively cooling a heat-generating electronic component having an operating temperature range above normal room temperature and a first heat transfer surface disposable in thermal adjacency with a second heat transfer surface of a thermal dissipation member to define an interface therebetween, said method comprising the steps of:

(a) providing a thermally-conductive material which is form-stable at normal room temperature in a first phase and conformable in a second phase to substantially fill said interface, said material having a transition temperature from said first phase to said second phase within the operating temperature range of said electronic component and comprising a blend of:

(i) from about 25 to 50% by weight of an acrylic pressure sensitive adhesive component having a melting temperature of from about 90-100°C;

(ii) from about 50 to 75% by weight of an α -olefinic, thermoplastic component having a melting temperature of from about 50-60°C; and

(iii) from about 20 to 80% by weight of one or more thermally-conductive fillers;

(b) forming said material into a self-supporting layer;

(c) applying said layer to one of said heat transfer surfaces;

(d) disposing said heat transfer surfaces in thermal adjacency to define said interface;

and

(e) energizing said electronic component effective to heat said layer to a temperature which is above said phase transition temperature.

15. (Allowed) The method of claim 14 wherein said material has a phase transition temperature of from about 70-80°C.

16. (Allowed) The method of claim 14 wherein said one or more thermally-conductive fillers is selected from the group consisting of boron nitride, alumina, aluminum oxide, aluminum nitride, magnesium oxide, zinc oxide, silicon carbide, beryllium oxide, and mixtures thereof.

17. (Allowed) A thermally-conductive interface for interposition between a heat-generating electronic component having an operating temperature range above normal room temperature and a first heat transfer surface disposable in thermal adjacency with a second heat transfer surface of a thermal dissipation member, said interface comprising a self-supporting layer of a thermally-conductive material which is form-stable at normal room temperature in a first phase and substantially conformable in a second phase to said interface surfaces, said material having a transition temperature from said first phase to said second phase within the operating temperature range of said electronic component, and comprising a blend of:

- (a) from about 25 to 50% by weight of an acrylic pressure sensitive adhesive component having a melting temperature of from about 90-100°C;
- (b) from about 50 to 75% by weight of an α -olefinic, thermoplastic component having a melting temperature of from about 50-60°C; and
- (c) from about 20 to 80% by weight of one or more thermally-conductive fillers.

18. (Allowed) The interface of claim 17 wherein said material has a phase transition temperature of from about 70-80°C.

19. (Allowed) The interface of claim 17 wherein said one or more thermally-conductive fillers is selected from the group consisting of boron nitride, alumina, aluminum oxide, aluminum nitride, magnesium oxide, zinc oxide, silicon carbide, beryllium oxide, and mixtures thereof.